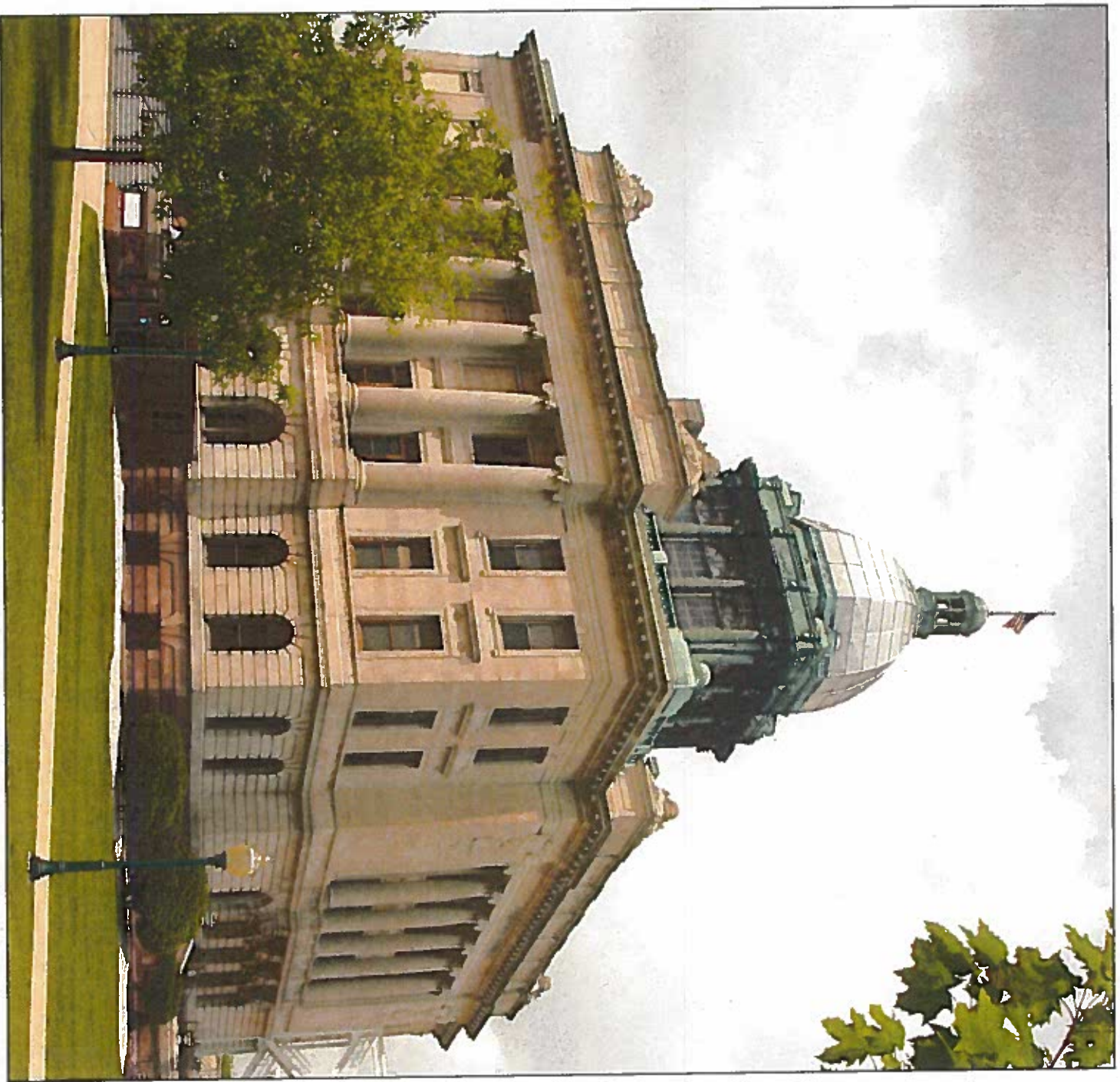




# *Manitowoc* COUNTY COURT HOUSE

*Historic Structure Report, August 2004*



CONTRIBUTING FIRMS

*Banco Architects, Inc.*

*Kahler Slater Architects, Inc.*

*Old Northwest Research*

This Historic Structure Report (HSR) is a summary of the combined efforts of many individuals who have contributed significant time and effort in compiling the information provided within this report. Jeffery Beyer, Public Works Department Director, and Gerard Neuser, Public Works Department Assistant Director, have enthusiastically represented Manitowoc County. Their dedication and assistance in defining the focus of this report and in assisting in the gathering of resource materials were essential to the completion of all work. The HSR consultant team members included Bamco Architects, Kahler Slater Architects, Old Northwest Research and Hamann Construction. Throughout the development of the report, the Bamco Architects team, led by Robert Jagemann, Gene Maloney and Daniel Bayer, conducted extensive research, gathered information from existing county archival records and prepared the final CAD drawings included within the report. Richard Eschner of Kahler Slater directed and prepared the written content of the completed report. Bonnie Pawelski of Kahler Slater provided graphic design services for the report. Robert Fay of Old Northwest Research conducted significant research of the history of the building from local, regional and statewide resources, and he prepared the written historical overview of the community and building. Representing Hamann Construction, Jim Hamann provided building and construction systems oversight, as the history of the building was evaluated and construction conditions were analyzed. Other resources included the following:

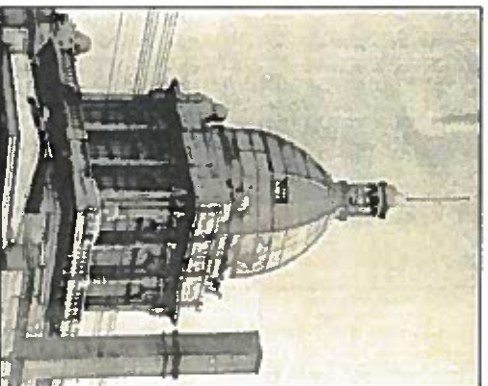
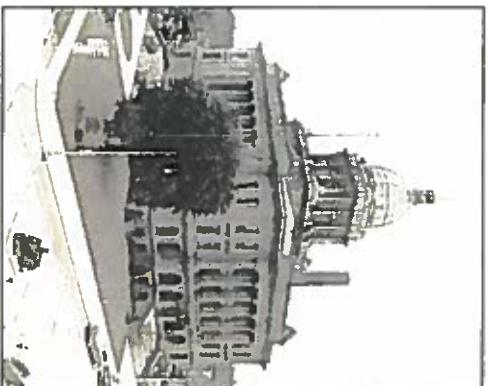
## ACKNOWLEDGEMENTS

- Manitowoc County Public Works Department
- Manitowoc County Clerk's Office
- City of Manitowoc Planning Department
- City of Manitowoc Inspection Department
- *Herald Times Reporter*, Manitowoc
- Manitowoc Public Library
- Manitowoc County Historical Society
- Wisconsin Historical Society
- Wisconsin Society, American Institute of Architects
- Kenneth Brey, retired Professional Engineer, Manitowoc
- Roy H. Stark, retired Architect, Manitowoc
- Calvin Stein, building designer and retired City of Manitowoc building inspector
- 2002 Wisconsin Enrolled Commercial Building Code
- Previous completed studies:
  - Renovation and Expansion Feasibility Study prepared by the Hoffman Corporation, dated November 9, 1998
  - Courthouse Analysis and Renovation Report prepared by Bray Associates, Architects dated September 9, 1999
  - Sommersville Associates Space Study dated February 1994

We have also utilized the resources and knowledge of other parties but were unable to list those resources due to space limitations.



## EXECUTIVE SUMMARY



The Manitowoc County Court House is the second court house located on the current site. Architect Christian H. Tegen designed the building in 1902-04, and contractor George Rickman & Sons completed construction in 1907. The final building cost amounted to approximately \$238,000. The building was officially accepted by Manitowoc County on November 12, 1907. During almost one hundred years of continued use, changing and growing space and technological needs have presented the need for continued remodeling during the past ten decades, and this trend has continued with many county-operated services now being located in other adjacent or off-site locations.

Most significantly, a spring storm in 1950 significantly damaged the original steel-framed glass dome located on the roof of the building. Stainless steel panels were subsequently installed to replace the glass panels and to reduce future maintenance concerns. The interior dome was concurrently remodeled with the introduction of a service platform located at the base of the exterior dome and above the interior dome. The exterior dome serves as a visual focal point and symbol of the county government when viewed from all directions. During the past decade, a number of studies have identified potential restoration and remodeling goals, and this report has been prepared at the request of Manitowoc County to summarize and prioritize a recommended scope of select restoration for the building. The restoration considerations pertain to (1) the dome, (2) the rotunda, (3) the exterior stairs located at the north, east and south elevations of the building, (4) needed tuck pointing and masonry repairs for the building exterior walls, (5) the replacement of the exterior fire exit stairway located on the east elevation, and (6) the second floor space that currently houses the court room for Branch No. 3. As the current and near-term functional and restoration needs were evaluated by Manitowoc County representatives, these building components were deemed most essential in relation to needed improvements, continued building use and maintenance concerns. Various community groups and individuals have expressed interest in building improvements that will address functional and maintenance needs, and, most importantly, enhance the building in a manner that will return the building to its earlier prominence in the community. Restoration or remodeling considerations relating to all other building functions and spaces located on all floors are specifically excluded from this study.

This report intentionally focuses on restoring those building components and functions that will make prudent use of available resources, will best enhance the public spaces, will provide continued public use of the building, and will provide increased long-term durability. Restoration or remodeling of other internal spaces occupied by a variety of county services is excluded from these recommendations.



### 1) DOME

*Remove stainless steel cladding on exterior dome, and metal paneling and applied insulation on the interior dome. Complete select reconstruction of both domes to allow natural light to transmit into the space beneath the domes and Rotunda, in a manner that is similar to the original design.*



### 2) ROTUNDA

*In conjunction with the restoration of both domes, complete select restoration of the wall, ceiling and floor finishes, and perimeter walls at each floor. Additional murals may be placed on specific wall surfaces to complement the original historical detail within the space. The design and selection of new, discrete lighting within the Rotunda, the interior dome and exterior dome will support the enhancement of this central focal point of the building.*



### 3) NORTH, EAST AND SOUTH EXTERIOR STAIRS

*Existing stairs are the third generation of stairway construction. Reconstruction of each stair and repairs to adjacent sand stone walls is recommended to address maintenance, safety and aesthetic needs. Replacement of existing pole lights placed on top of flanking walls is also recommended to achieve an appearance that is historically more consistent with the original design.*



### 4) EXTERIOR TUCK POINTING, MASONRY RESTORATION, REPAIRS AND LANDMARK LIGHTING

*Required tuck pointing, masonry restoration, chemical cleaning of all cut stone surfaces, roofing repairs to eliminate sub-surface moisture penetration, and surface staining is recommended. The addition of discrete new exterior landmark lighting concurrent with the restoration of the domes and exterior masonry restoration work is recommended. This lighting will complement all restoration work and will provide the needed visual impact that will truly enhance the selected restoration work.*



### 5) EXTERIOR FIRE STAIR

*This stair was added in 1975 to provide a State of Wisconsin code-required second exit for the second and third floors. Removal of this stair and construction of a new second interior stairway is recommended to address this need. Completion of this work is considered of equal importance to the successful completion of other select restoration work.*



### 6) BRANCH COURT NO. 3

*Significant previous remodeling that is dramatically out of character with that of the remainder of the original design and public functions within the building has been completed. Restoration of this room in a manner that is more sympathetic with the character of Branch Court No. 3 and the rest of the building is recommended.*

This Historic Structure Report (HSR) was initiated through a request for proposal (RFP) process developed and issued to consultant candidates by the Manitowoc County Public Works Department in January 2004. Manitowoc County had previously determined that an HSR study be completed to allow definition of needed building improvements, establish a prioritization for the selected improvements, and to seek public, private and financial support for select restoration and remodeling of the building. This report is intended to serve as the foundation from which restoration and remodeling can be completed as deemed necessary and affordable by the county. Specific solutions and related details are not included within the scope of this report. That work must be completed in a separate, future detailed design and cost estimating design phase.

Manitowoc County has been represented by Public Works Department representatives Jeffery Beyer, Public Works Department Director, and Gerard Neuser, Public Works Department Assistant Director. As the report was prepared, various meetings and reviews were conducted with other county representatives on both a formal and informal basis.

The report has been prepared by the consultant team that was selected from the request for proposal process. The report has been completed through the combined efforts of Bamco Architects of Manitowoc, Kahler Slater Architects of Milwaukee, Robert Fay, Old Northwest Research of Two Rivers, and Hamann Construction of Manitowoc. The HSR consultant team conducted extensive on-site observations of the existing building during the development of the report. Numerous photographs were also taken to document existing conditions. Some of those photos have been selectively incorporated into various portions of this report.

## METHODOLOGY

### **HISTORICAL STRUCTURE REPORT GOALS AND FOCUS**

It is important to note that this report is not intended to provide a detailed analysis of the entire building, from a restoration and remodeling standpoint. The initial request for proposal and subsequent informational meetings held with consultant team candidates noted that the report should focus on providing a summary overview of restoration recommendations relating to six specific components that are a part of the building. Those issues on which the report was initially intended to focus included: (1) the dome, (2) rotunda, (3) the north, south and east exterior stairs, and (4) exterior tuck pointing and masonry restoration or repairs. As the report preparation was initiated, Manitowoc County requested an evaluation and restoration or remodeling recommendation relating to: (5) the second exterior fire exit stairway (an open, steel-framed stair added in 1975, located at the east elevation) and, (6) the Branch Court No. 3. This report provides an evaluation and recommendations relating to those building features, but does not provide specific design solutions or cost estimates to those recommendations and their implementation. More detailed design solutions and related cost estimates must be part of a future design and budgeting phase for the selected building restoration.



## RECOMMENDED RESTORATION AND REPAIRS



### DOME

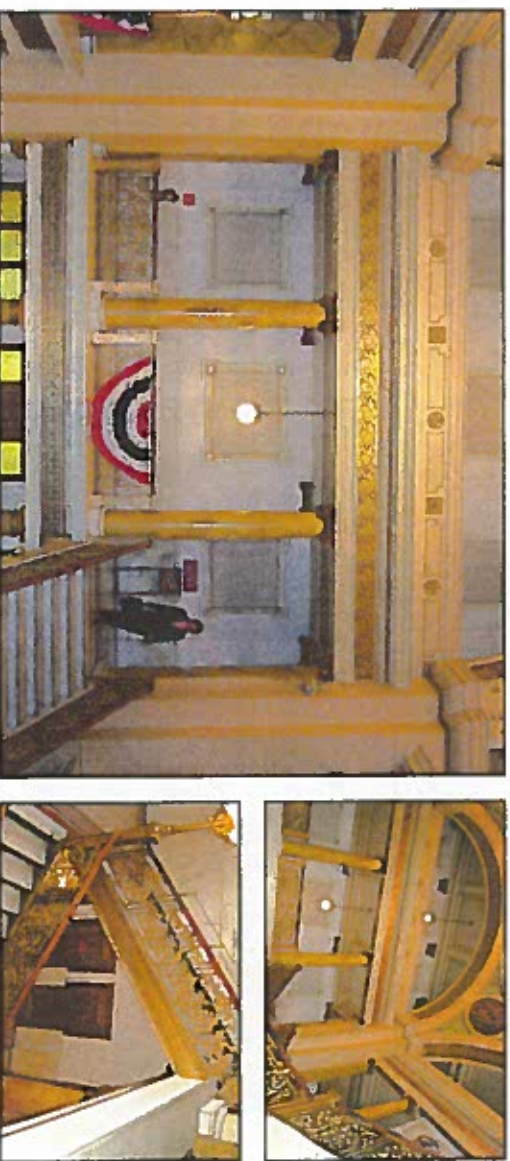
The dome is the focal point of the building when viewed from the immediate neighborhood and from afar. In many ways, the dome (and building placed beneath the dome) is the civic image of the Manitowoc County government. Restoration of the dome to a condition that replicates the original construction as closely as is feasible is recommended. Restoration considerations must allow for the intermediate steel deck, constructed in beneath the exterior dome in 1950, to remain in place in some form. To allow the transmission of natural light from the exterior dome to pass downward to the interior dome, removal of a portion of the deck surface (with steel bar joist deck structure remaining in place) may be a concept to be considered. This will allow the transmission of natural light downward to the top of the inner dome below and into the three-story rotunda located below the interior dome. Research has indicated that the original glazing may have been some form of flat, transparent glazing panels set into the steel framing that is currently in place. Significant on-site inspection of all facets of the existing dome framing will have to be conducted to provide a detailed assessment of existing conditions, and to determine the best means of reinstalling new glazing into the original structural framing. From a purely historical restoration viewpoint, the new glazing and glazing framing system should match the original system in all details. However, from the viewpoint of improved quality, maintenance and life span, a wide variety of new glazing types and window framing systems are now available that can exceed the functional and thermal performance of the original system. These new systems can provide improved overall weather resistance and water tightness, as compared to the original system. The new translucent glazing shall be either tempered or laminated, and of a thickness required to span the polygonal openings, and to achieve required structural integrity. Most importantly, the glazing framing, gasket and mullion system should match the original sight lines (glass openings and mullion size, width and profile) as closely as is feasible. Research to date has concluded that detailed drawings of the original glazing and glazing framing are no longer available. Since the outer dome does not serve as the primary heat loss control envelope for the building roof and dome system, the new dome glazing would not necessarily have to be insulated glazing. However, use of new insulated glazing within the outer dome system may be considered to enhance the combined thermal performance of the inner and outer domes. Provision of new interior lighting to highlight the dome when viewed from the exterior must also be an integral component of the redesign of the complete exterior dome glazing work.

In a similar fashion, the existing metal paneling attached to the interior dome shall be replaced with translucent glazing set into the existing wood framing system. As with the exterior dome, significant on-site inspection of all facets of the existing interior dome framing must be conducted to ascertain all existing conditions, and to determine the best means of installing new glazing into the original structural framing. Reuse of the existing wood framing ~ or partial or complete replacement of the wood framing system ~ must be considered, based on future extensive on-site inspection and detailed design work. The selection of glazing shall be based on the best match with the original design, appearance and performance. Use of insulated, translucent and tempered (or laminated) glazing in conjunction with the new exterior dome glazing system is recommended to achieve the optimum functional thermal performance that will best replicate the original

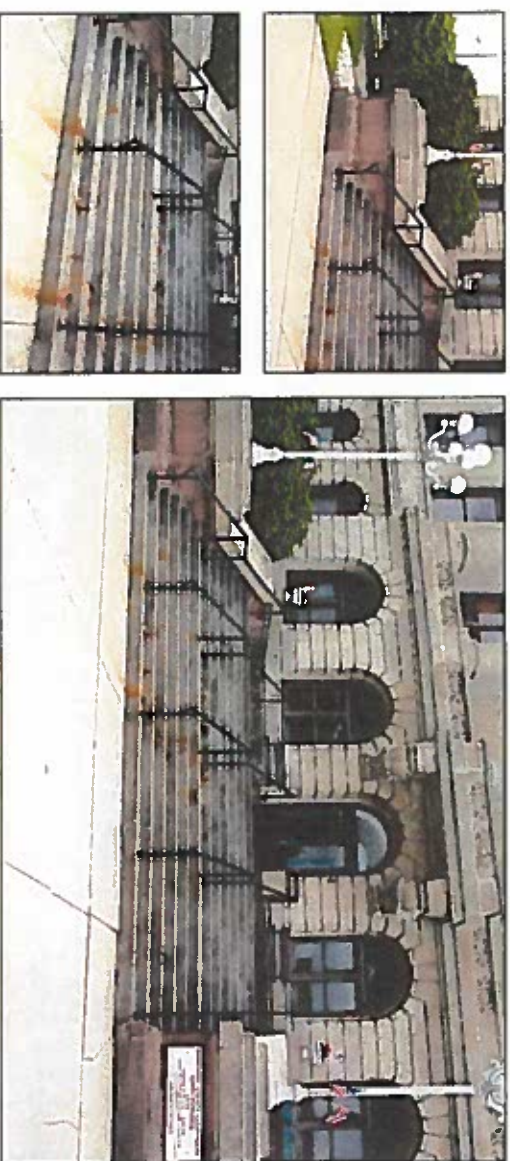




EXISTING INSULATION AND VENTILATING SYSTEM COVERING TOP OF INTERIOR DOME



EXISTING WALLS AT WHICH MURALS DO NOT OCCUR; CENTRAL, OPEN STAIR



EXISTING DETERIORATING EXTERIOR STAIRS

design and intent of the original interior dome. Removal of the existing rigid insulation system and ventilating ductwork system currently place on top of the dome is recommended. The location of the existing supply and exhaust grill system must be re-evaluated with consideration of integrating required grilles into the vertical wall support located beneath the dome. Integration of new, discrete lighting on top of or beneath the dome, or a combination thereof, is recommended.

The successful restoration of both domes must be viewed as a combined package to ensure that the desired visual and functional result will be attained. Both domes are integral to one another and to the rotunda space below.

#### ROTUNDA

With few exceptions, the design and condition of all surfaces within the existing rotunda appear to be very similar to the original construction. Some decorative murals have been refurbished during recent years. Careful inspection and restoration of the remaining painted decorative friezes, wood and plaster moldings, all painted surfaces, and steel and wood handrails is recommended. Obtaining paint chips from existing surfaces to determine the original color palette will be a part of the restoration process. The current decorative wrought iron handrail newel posts, balusters and trim are painted gold. Repainting all handrail construction black to match original construction is recommended. Some existing glazed sidelight and door panels that are located within the perimeter walls of the corridors that surround the rotunda have been replaced with bottle glass ~ type glass that is inconsistent with the original glazing. Replacement of this glazing is recommended. In addition, some entry doors and related wood casings have been part of a previous remodeling that does not match original construction. Select restoration of these entries to replicate the original design is recommended.

#### WALL MURALS

Original, well-maintained murals that depict the history of the Manitowoc region are located on walls that surround the rotunda. They can be viewed from a variety of locations throughout the rotunda. In addition, other niches or recessed, painted plaster walls are located within other walls that encompass the rotunda. These areas may be considered candidates for installing new murals or other art work that would complement the original murals and character of the interior space. If considered, implementation of a carefully defined process for adding new murals is recommended. This will ensure that the completed results will be sympathetic to the original design and to the history of the building and community. Defined procedures for implementing the solicitation of interested artists and for selecting the final artwork have been used in other communities and by the Wisconsin Arts Board for many years.



### EXTERIOR CONCRETE STAIRS

All three concrete stairways located at the north, east and south have been extensively patched or replaced. The surfaces of the concrete treads and risers are irregular in profile and are not consistent with the appearance of the finishes and materials that were originally constructed. Some research indicates that the original stairs may have been constructed with granite, in lieu of the current concrete. This must be verified through additional research. While cut stone may be initially higher in cost than concrete, a cut stone system will have a longer lifetime as compared to concrete, when properly designed, installed and maintained. In addition, the current handrails do not fit the original historic character of the building. Significant rust stains have been noted on the stair risers in numerous locations. This is caused by moisture penetration into steel reinforcing placed beneath the exposed surfaces of the risers and treads. The south stair, potentially the most heavily used as a connection to the new county jail, also has a gray-colored surface on the treads and risers. Complete replacement of the stairs and handrails is recommended. Replacement with new stairs that more closely harmonize with the historical context of the building is recommended. Additional research to confirm whether or not the original stairs were constructed of cut stone or of concrete must be completed. Lastly, the original light poles that are located on top of the walls that flank the stairs have been replaced with fixtures that were intended to be similar to the original units but are smaller than the original units. This is apparent in the placement of the remaining anchor bolts that are now exposed to view. Selection of new fixtures whose size, design and finish matches the original fixtures will significantly add to the sense of appropriate and sensitive historical restoration.

### EXTERIOR TUCK POINTING, MASONRY RESTORATION, REPAIRS AND LANDMARK LIGHTING

In general, existing limestone wall cladding, Ionic columns, decorative cornices, and balconies on all building elevations are in good condition. Evidence of significant efflorescence (white, powdery staining) on various surfaces is noted on all elevations, and further detailed inspection of all wall surfaces, balconies and columns is required. The cause of entry of moisture into these surfaces must be defined and solutions determined to prevent further damage and discoloration. Once the repairs have been completed, chemical cleaning of all cut stone facade surfaces is recommended. A variety of chemical masonry cleaning materials that are environmentally safe and appropriate for use on the limestone and all exterior masonry are currently available in the marketplace. Sandblasting in any form is not recommended. Once the cleaning and joint repair processes have been completed, application of appropriate joint and crack sealants must be completed. See Appendix C for more detailed comments pertaining to each building facade. A brief overview of specific work on each elevation is as follows:

- **East Elevation:** Efflorescence noted at second floor beltline, windows and door openings. A previous crack in the stonework haunch at the underside of the balcony has been patched. Rework with materials that more closely match the color of the stone is recommended.

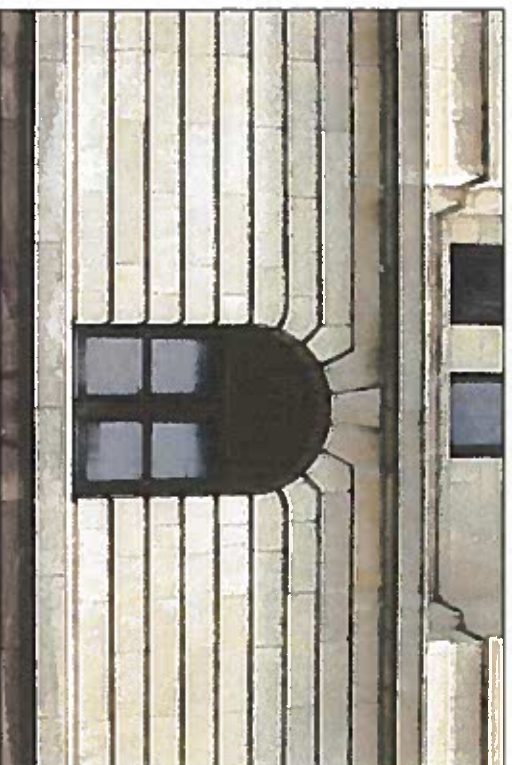
NORTH ELEVATION ~  
ORIGINAL WINDOWS  
REMOVED AND REPLACED  
WITH MASONRY INFILL



WEST ELEVATION ~  
ORIGINAL WINDOWS  
REMOVED AND REPLACED  
WITH MASONRY INFILL



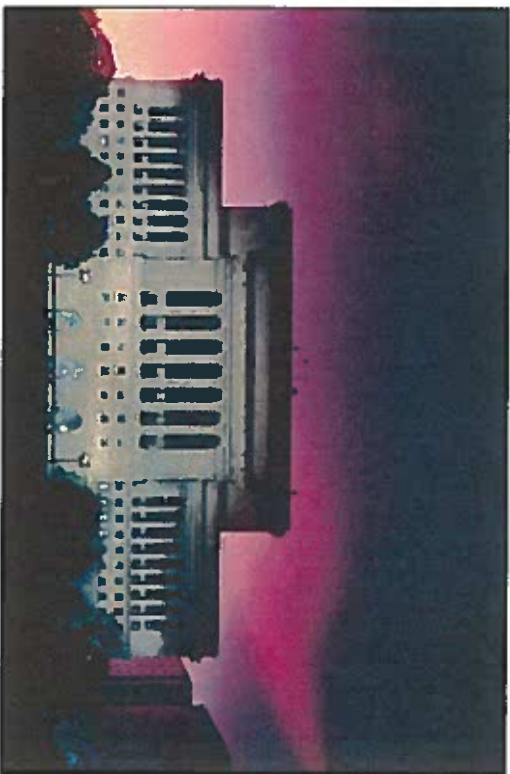
ALL ELEVATIONS ~  
ORIGINAL CLEAR  
ARCHED WINDOWS  
REPLACED WITH OPAQUE  
TRANSOM PANELS





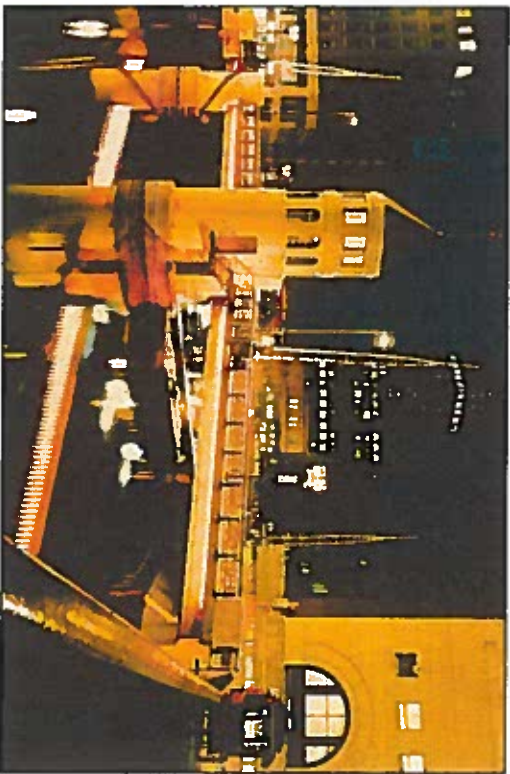
LANDMARK LIGHTING

EXAMPLE ~  
MILWAUKEE COUNTY  
COURTHOUSE  
(Completed by Kahler Slater)



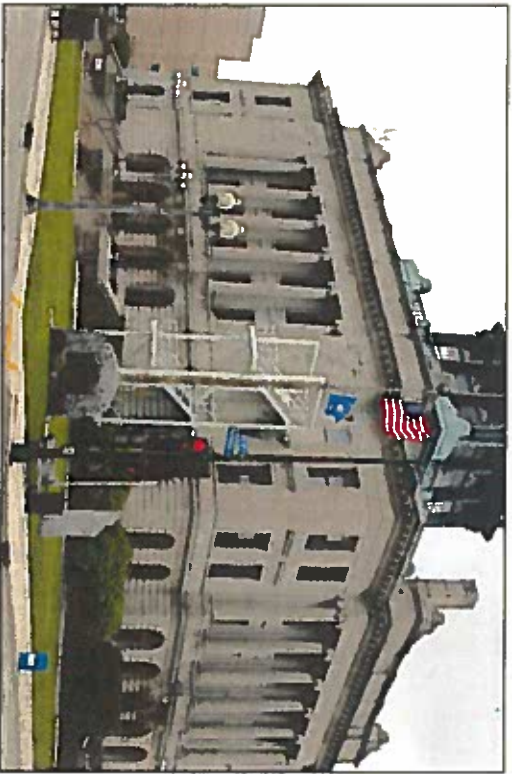
LANDMARK LIGHTING

EXAMPLE ~  
WISCONSIN AVE. BRIDGE  
(Completed by Kahler Slater)



EXTERIOR SECONDARY

FIRE EXIT STAIR  
CONSTRUCTED IN 1975



- **North Elevation:** At the second floor, original windows were removed and replaced with stack bond, cream-colored face brick to accommodate the functional needs of the court room located behind these panels. Removal and replacement with either functional windows matching the other windows (with corresponding court room remodeling required), or replacement with windows that have opaque, reflective glazing to allow the original window pattern to be restored, is recommended.
- **South Elevation:** Research completed to date concludes that the existing stone infill panels that occur at window openings are not of original construction. They may have been added as part of a court room remodeling. If not original, provide new windows and glazing in a manner similar to the options noted for the north elevation.

- **West Elevation:** The pattern of windows at the second floor and at the first floor is not consistent with the rest of the building, with one window at the second floor and two at the first floor missing in the rhythm of windows that occur on the facade. If not part of the original construction, consider provision of new windows in a manner similar to the options noted at the north and south elevations. The original chimney was modified with a vertical extension. Retention of this extension but replacement of the extension materials with masonry work that matches the original chimney construction below is recommended.

- **All Facades:** Original windows were replaced with new, aluminum-framed, insulated glass units in 1978. While the window size, mullion placement, profile and mullion spacing is similar to that of the original units, opaque, upper transom panels are now typically located in front of interior, suspended acoustical tile ceilings that are at a lower height than the top of the window head. Replacement of the windows with frame profiles and glazing that more closely matches the original units, and required remodeling of the related interior ceilings, is not considered functionally or fiscally prudent at this time. However, replacement of the current non-reflective opaque transom panels with reflective, opaque glazing is recommended. This will more closely simulate a window and will provide an appearance that will be more consistent with the design and construction of the original building.

**EXTERIOR LANDMARK LIGHTING**

As the final scope of restoration work is selected, the integration of new landmark lighting into the exterior of the building is recommended to enhance select facade components of the entire building. Assuming that restoration of the dome will be of a high priority, the addition of discrete, focused light fixtures to highlight the dome and other significant exterior features of the building will greatly enhance the presence of the building in the entire downtown region of Manitowoc. Landmark lighting concepts focus on lighting the key features of a building, not simply and inappropriately providing a high intensity light coverage over an entire building. Through selection of current lighting technology systems, the lighting can be accomplished in a manner that is unobtrusive, providing beneficial highlighting to the building, while respecting the character of the building, the surrounding neighborhood, and the building occupants. The process of designing



and integrating landmark lighting systems into a building and adjacent neighborhood has been successfully completed throughout the state during recent years.

#### **EXTERIOR SECONDARY FIRE EXIT STAIR**

This existing building function is a key facet in completing the successful, selective restoration of the court house to its original design and appearance. Although visually smaller in scale than the dome, replacement of the stair is in many ways of equal importance to the success of the exterior restoration effort. The existing open, steel structure stair constructed in 1975 is located at the north end of the east facade, and is an obvious and inconsistent change from the original building design. It significantly detracts from the design and civic image of the court house. Assuming that the stair is needed for functional and code conformance purposes, removal of the exterior stair and reconstruction of the stair at a new location within the building is recommended. This will require a careful evaluation of where the stair can be reconstructed internally while minimizing adverse affects on internal space use. Since all Manitowoc County functions are not currently placed within the court house, and future total departmental space needs exceed that additional internal space to accommodate the stair, and moving select functions (or portions thereof) to other locations within the building, or to an off-site location. Completion of this reconstruction is recommended to ensure that the final selected scope of restoration work meets the restoration goals that have been established. An option of locating this stair in a future addition that will connect the court house with the existing county jail has also been discussed conceptually by county representatives.

INTERIOR VIEW OF  
BRANCH COURT NO. 3



#### **BRANCH COURT NO. 3**

Extensive previous remodeling of this room exhibits a dramatic and inconsistent fit with the original building design. We recommend that the room be completely remodeled. Replacement of wall finishes, flooring, suspended ceiling, lighting, millwork and wood trim detailing with new construction and finishes that more closely match that of the original building is recommended. The design details of Circuit Court No. 2 may serve as a foundation for the implementation of functional and aesthetic solutions in this room.

#### **OTHER INTERIOR FUNCTIONAL SPACES**

Other functional spaces occupied by county services on all floors have undergone significant and minor remodeling during the life of the building. Considerations pertaining to restoration or remodeling of those spaces that are located outside the perimeter walls of the rotunda at all levels have been intentionally excluded from the scope and intent of this Historic Structure Report.